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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/807,351

03/24/2004

Akihito Kusano

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05/22/2006

BUCHANAN INGERSOLL PC
(INCLUDING BURNS, DOANE, SWECKER & MATHIS)
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EXAMINER

BURCH, MELODY M

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/807,351	Applicant(s) KUSANO ET AL.	
	Examiner Melody M. Burch	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/12/06 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "the wheel cylinder" in line 2 of the claims is indefinite since it is unclear to the Examiner as to which of the plurality of wheel cylinders previously recited Applicant intends to refer to.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3683

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 10, 11, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6199964 to Ota et al.

Re: claims 1, 10, and 12-14. Ota et al. show in figure 3 a vehicle hydraulic brake device comprising a hydraulic pressure source MC,RS for generating and outputting a predetermined hydraulic pressure, a pressure adjusting valve including a pressure adjusting mechanism RG for adjusting the output hydraulic pressure of the hydraulic pressure source MC,RS to a value corresponding to a brake operating amount and wheel cylinders Wrl-Wfr actuated by the output hydraulic pressure of the pressure adjusting valve for imparting braking force to wheels of the vehicle, further comprising a hydraulic passage MR, the horizontal line between MR1 and MR2 leading from the pressure adjusting valve to the wheel cylinders, a hydraulic pressure supply passage AM for supplying hydraulic pressure from the hydraulic pressure source to the hydraulic passage at a junction shown on the horizontal line between MR1 and MR2 therewith, the hydraulic pressure supply passage by-passing the pressure adjusting mechanism of the pressure adjusting valve as shown, a first proportional solenoid valve STR provided in the hydraulic pressure supply passage for reducing the output hydraulic pressure of the hydraulic pressure source and supplying it to the hydraulic passage leading from the pressure adjusting valve to the wheel cylinders, a second proportional solenoid valve SA3 provided in the hydraulic passage at a location between the pressure adjusting valve and the junction and operable for reducing the output hydraulic pressure supplied from the hydraulic pressure supply passage and recirculated back to RS,MC and into

Art Unit: 3683

MR, a check valve CV5 provided parallel to the second proportional valve and allowing fluid flow from the pressure adjusting valve toward the hydraulic pressure supply passage and a control means ECU for controlling operations of the first and second proportional solenoid valves, wherein control of the hydraulic pressure supplied to the wheel cylinders during automatic brake control is performed by the first proportional solenoid valve and the second proportional solenoid valve as disclosed in col. 10 lines 3-4.

Re: claims 2, 3, and 11. See the rejection of claim 1 and a pressure chamber within the element labeled MC connected to the pressure regulating chamber as shown (RG is connected to MC), a master cylinder MC (and RS in this case is the hydraulic pressure source for generating and outputting a predetermined hydraulic pressure by way of control of MC) inherently including a master piston actuated by the output pressure of the pressure adjusting valve introduced into the pressure chamber since, as broadly claimed, the hydraulic pressure of the pressure adjusting valve is circulated throughout the brake device, a solenoid valve PC3 for supplying the output hydraulic pressure of the pressure adjusting valve to a hydraulic system leading from the master cylinder to the wheel cylinder Wrr, a hydraulic pressure supply passage as set forth above connected to a hydraulic passage as set forth above connecting the pressure adjusting valve to the solenoid valve.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3683

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. in view of US Patent 6422662 to Haas.

Ota et al. lack the limitation of the means for detecting that the output hydraulic pressure of the pressure adjusting valve has become equal to the hydraulic pressure of the hydraulic pressure supply passage, and wherein when it is detected by the means that the output hydraulic pressure of the pressure adjusting valve has become equal to the hydraulic pressure of the hydraulic pressure supply passage, automatic brake control is stopped.

Haas teaches in the abstract, in col. 4 lines 24-44, and in figure 1 the use of a brake device in which a means 107,108,110 for detecting that the output hydraulic pressure of above valve 113 has become equal to the hydraulic pressure of the hydraulic pressure supply passage or the area below valve 113, and wherein when it is detected by the means that the output hydraulic pressure of the pressure adjusting valve has become equal to the hydraulic pressure of the hydraulic pressure supply passage or when the pressure at the wheel cylinders is higher than the hydraulic , automatic brake control is stopped.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Ota et al. to have included means for detecting and comparing the hydraulic pressures, as taught by Haas, in order to provide a means of determining when to trigger pump activation.

Response to Arguments

8. Applicant's arguments filed 9/21/05 have been fully considered but they are not persuasive. Examiner notes that Ota et al. show the claimed recitations, as amended, (including the limitation of the hydraulic pressure supply passage by-passing the pressure adjusting mechanism) as shown in figure 3 of Ota et al. and as set forth above in the Office action.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/807,351

Page 7

Art Unit: 3683

May 18, 2006

Melody M. Burch
Melody M. Burch
Primary Examiner
Art Unit 3683
5/18/06